

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
ENGINEERING AND COMPLIANCE  
APPLICATION PROCESSING AND CALCULATIONS

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P/C

COMPANY NAME AND ADDRESS

Exide Technologies  
2700 South Indiana Street  
Los Angeles, CA 90023

ID 124838

mailing and equipment address

EQUIPMENT DESCRIPTION

**(NEW EQUIPMENT AND CHANGES TO EXISTING EQUIPMENT ARE INDICATED IN BOLD TYPE)**

APPLICATION NO. 500782

TITLE V FACILITY PERMIT REVISION

APPLICATION NO. 500783 (NEW)

**RAW MATERIAL PREPARATION SYSTEM TOTAL ENCLOSURE BUILDING, 125'W. X 329'-0"L. X 75'-0"H., APPROXIMATE DIMENSIONS.**

APPLICATION NO. 500784 (previous A/N 496416)

AIR POLLUTION CONTROL SYSTEM NO. 13 CONSISTING OF:

1. DUST COLLECTOR NO. 1, MAC, CARTRIDGE TYPE, MODEL 144MCF494, 14'-0" DIA. X 42'-6"H., WITH 494 CARTRIDGE FILTERS, EACH 0'-5" DIA. X 12'-0"L., PULSE JET CLEANED.
2. DUST COLLECTOR NO. 2, MAC, CARTRIDGE TYPE, MODEL 144MCF494, 14'-0" DIA. X 42'-6"H., WITH 494 CARTRIDGE FILTERS, EACH 0'-5" DIA. X 12'-0"L., PULSE JET CLEANED.
3. EXHAUST SYSTEM WITH TWO 150 H.P. BLOWERS VENTING TWO REVERBERATORY FURNACE FEED HOPPERS, A BELT CONVEYOR, AN APRON CONVEYOR, A SCREW CONVEYOR, A WEIGH BELT CONVEYOR, **2 OVERHEAD HOODS INSIDE THE SOUTH CORRIDOR TOTAL ENCLOSURE BUILDING, 10 OVERHEAD HOODS INSIDE THE RAW MATERIAL PREPARATION SYSTEM TOTAL ENCLOSURE BUILDING, AND 14 LEAD REFINING POT FURNACE BURNER EXHAUSTS.**

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APPLICATION NO. 500785 (previous A/N 496416)

**APCS 13 SUPERFLUOUS APPLICATION**

APPLICATION NO. 500786 (previous A/N 374221 272981)

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. CYCLONE SEPARATOR, 5'-10"DIA. X 17'-7"H.
2. **SPARK ARRESTOR, FLAMEX, WITH A MODEL FMZ 4100 GAB 24 MICROPROCESSOR CONTROL SYSTEM AND BATTERY BACK-UP, EIGHT FLAMEX MODEL FUX 3001-E OPTICAL INFRARED SPARK DETECTORS AND WITH TWO FLAMEX MODEL F180 SIDEWALL WATER SPRAY NOZZLES.**
3. BAGHOUSE, US AIR FILTRATION, MODEL NO. 4-613-PTW-144-6, PULSE JET TYPE, FOUR COMPARTMENTS, 9'-8"W. X 11'-1"L. X 32'-0"H., EACH COMPARTMENT WITH 78 EXPANDED TEFLON MEMBRANE FILTER BAGS WITH TEFLON SUBSTRATES, EACH 0'-6"DIA. X 12'-0"L., AND WITH FOUR ROTARY VALVES, 1/2-H.P. EACH.
4. EXHAUST SYSTEM WITH A 100-H.P. BLOWER VENTING A LEAD SCRAP ROTARY DRYER AND 2 SCREW CONVEYORS.
5. EXHAUST STACK, 3'-0"DIA. X 69'-0"H.

APPLICATION NO. 501055 (NEW)

**TITLE V FACILITY PERMIT REVISION (SUPERFLUOUS APPLICATION)**

APPLICATION NO. 501056 (NEW)

SMELTING AND REFINING BUILDING SYSTEM CONSISTING OF:

1. **SMELTER TOTAL ENCLOSURE BUILDING, 140'W. X 500'L. X 25'H., APPROXIMATE DIMENSIONS.**
2. **SOUTH CORRIDOR TOTAL ENCLOSURE BUILDING, 45'W. X 140'L. X 25'H., APPROXIMATE DIMENSIONS.**

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APPLICATION NO. 501057 (previous A/N 374250)

AIR POLLUTION CONTROL SYSTEM NO. 9 CONSISTING OF:

1. SCRUBBER (**C165**), MAPCO, MODEL MW-100-24, HORIZONTAL PACKED BED TYPE, 11'-2"W. X 15'-0"L. X 8'-3"H., WITH 2 FEET OF PACKING, A CHEVRON-TYPE MIST ELIMINATOR, A 0'-4" THICK MESH PAD, AND A 3-H.P. LIQUID PUMP.
2. **HEPA FILTER MIST ELIMINATOR (C172), MAPCO, MODEL MW-100-24, WITH 16 HEPA FILTERS, EACH 2'-0"W. X 2'-0"L. X 0'-11.5" THICK.**
3. EXHAUST SYSTEM WITH A **100-H.P.** BLOWER VENTING A BATTERY CRUSHER, A BATTERY CRUSHER FEED BELT CONVEYOR, THREE MUD HOLDING TANKS, **AND A RAW MATERIAL PREPARATION SYSTEM TOTAL ENCLOSURE BUILDING.**
4. EXHAUST STACK (**S166**), 3'-8"H. X 65'-0"H.

APPLICATION NO. 501059 (NEW)

**ROTARY DRYER TOTAL ENCLOSURE BUILDING, 15'-0"W. X 45'-0"L. X 17'-0"H., APPROXIMATE DIMENSIONS.**

APPLICATION NO. 501060 (previous A/N 374194)

AIR POLLUTION CONTROL SYSTEM NO. 5 CONSISTING OF:

1. BAGHOUSE, EIGHT COMPARTMENTS, 64,000 SQ. FT. FILTER AREA, WITH EIGHT 2-H.P. SHAKERS AND AN EMERGENCY AIR BLEED-IN DAMPER.
2. EXHAUST SYSTEM WITH A 450-H.P. BLOWER VENTING A BLAST FURNACE THIMBLE, A LEAD WELL, A SLAG TAP, TWO LAUNDERS, A GENERAL FEED FLOOR HOOD, TWO RECEIVING LEAD REFINING POT FURNACES, FIVE LEAD REFINING POT FURNACES, SEVEN DROSS HOPPERS, **AND A ROTARY DRYER TOTAL ENCLOSURE BUILDING.**

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APPLICATION NO. 501061 (NEW)

**VEHICLE WASH SYSTEM CONSISTING OF:**

- 1. VEHICLE WASH STATION, VEWI, MODEL TW-2000, 11'-6"W. X 67'-1"L. X 3'-6"H.**
- 2. WASH BASIN, 11'-6"W. X 37'-0.5"L. X 3'-6"H.**
- 3. PARTIAL BUILDING ENCLOSURE, 20'-0"W. X 38'-0"L. 20'-0"H. APPROXIMATE DIMENSIONS.**

APPLICATION NO. 501062 (NEW)

**HEPA VACUUM SWEEPER, LEAD ABATEMENT, TENNANT, MODEL 3640E, WALK-BEHIND TYPE, 2'-8"W. X 4'-8"L. X 3'-2"H., 1-H.P. ELECTRICALLY POWERED.**

HISTORY

The following table describes the status and description of the submitted applications:

A/N	DATE RECEIVED	CLASS	DESCRIPTION
500782	07/16/2009	III	TITLE V FACILITY PERMIT REVISION
500783	07/16/2009	I	RMPS TOTAL ENCLOSURE APPLICATION
500784	07/16/2009	I	APCS 13 (C156, C157) CONNECTION TO RMPS TOTAL ENCLOSURE
500785	07/16/2009	<b>I</b>	<b>APCS 13 (SUPERFLUOUS)</b>
500786	7/16/2009	I	NEW ROTARY DRYER BAGHOUSE SPARK ARRESTOR
501055	7/30/2009	<b>III</b>	<b>TITLE V FACILITY PERMIT REVISION (SUPERFLUOUS)</b>
501056*	7/30/2009	<b>I</b>	<b>SMELTING AND REFINING TOTAL ENCLOSURE BUILDING</b>
501057	7/30/2009	I	RMPS SCRUBBER ALTERATION
501059	7/30/2009	I	ROTARY DRYER TOTAL ENCLOSURE
501060	7/30/2009	I	POT FURNACE BAGHOUSE ADD CONNECTION TO ROTARY DRYER ENCLOSURE
501061	7/30/2009	I	NEW TRUCK WASH STATION
501062	7/30/2009	I	NEW HEPA VACUUM SWEEPER

\*501056, a superfluous application, will be used to permit smelting and refining building.

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The tables below summarize the recent permit history regarding the subject equipment:

AIR POLLUTION CONTROL SYSTEM NO. 13: (device nos. C156, C157, S158)	
500782	received 7/16/2009 -- Title V significant permit revision

RMPS BUILDING ENCLOSURE	
500783	Received 7/16/2009 for alterations to the raw material preparation system (RMPS) building by the total enclosure of various parts of this building which were previously open to the atmosphere. This building was previously exempt from permit requirements. It lost exemption pursuant to Order for Abatement (O/A) issued under case no. 3151-21 and lead NESHAP applicability.

AIR POLLUTION CONTROL SYSTEM NO. 13: (device nos. C156, C157, S158)	
500784	received 7/16/2009 to add one additional overhead hood in RMPS building.
496416	received 3/13/2009 for alteration to 374248 - add venting of 14 pot burner exhausts and one overhead hood in South corridor building.
374248	Exide change of ownership (C/O) application received 8/31/2000 - P/C pending
344815	P/C issued 1/27/1999 to GNB for new APCS No. 13

AIR POLLUTION CONTROL SYSTEM NO. 13: (device nos. C156, C157, S158)	
500785	received 7/16/2009--superfluous application covered by A/N 500784.

ROTARY DRYER BAGHOUSE SPARK ARRESTOR	
500786	Received 7/16/2009 to install a new spark arrestor in the rotary dryer furnace baghouse inlet. It is required by the O/A issued under case no. 3151-21.
374221	Received 9/14/2000 for C/O by Exide for rotary dryer APCS consisting of cyclone C143 and baghouse C144. P/O F36706 issued 1/15/2001.
272981	Received 9/16/1992 -- P/C issued to GNB on 10/6/1992, P/O F10946 issued to GNB on 12/19/1997

ROTARY DRYER BUILDING ENCLOSURE	
500786	Received 7/16/2009 to install a new total enclosure around the rotary dryer furnace. It is required by the O/A issued under case no. 3151-21. This is new construction with no prior history.

TITLE V REVISION APPLICATION	
501055	Received 7/30/2009--superfluous application covered by A/N 500782. It appears that this application was submitted in error because the permit applications for this project were submitted in two different batches. The first batch was received on 7/16/2009 and the second batch was received on 7/30/2009.

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SMELTING AND REFINING, SOUTH CORRIDOR TOTAL ENCLOSURE BUILDINGS	
501056	Received 7/30/2009--superfluous application covered by A/N 500783. This application will be adopted for the permit required for the smelter building complex. The existing smelting/refining/warehouse total enclosure building and the south corridor total enclosure building will be permitted under this application.

AIR POLLUTION CONTROL SYSTEM NO. 9	
501057	Received 7/30/2009 for alteration to APCS No. 9. The alteration consists of changing the blower motor horsepower from 40 H.P. to 100 H.P. and increasing the blower RPM. This change is being performed in conjunction with the conversion of the RMPS partial enclosure building to a total enclosure building.
374250	Received 8/31/2000 for change of ownership/alteration to APCS No. 9, P/C 7-31-2002. The alteration consists of adding a HEPA filter mist eliminator to this system.
344817	received 8/4/1998, P/C 2/26/1999 to GNB, cancelled 4/19/2002.

ROTARY DRYER TOTAL ENCLOSURE BUILDING	
501059	Received 7/30/2009 for the construction of a new total enclosure building around the rotary dryer and all of the conveyors and transition pieces in the reverb feed system. This building is being constructed pursuant to the O/A issued under case no. 3151-21.

AIR POLLUTION CONTROL SYSTEM NO. 5	
501060	Received 7/30/2009 to add additional venting by installing a new exhaust duct from this baghouse to the new rotary dryer total enclosure building.
374194	Application received on 9/14/2000 for C/O. P/O F73819 issued 2/18/2005 to Exide.
123780	Application received on 8/29/1984. P/O M40004 issued on 8/29/1984 to GNB

NEW VEHICLE WASH STATION	
501060	Received 7/30/2009 to install a new vehicle wash station on the south side of this facility. This station is being constructed pursuant to the O/A issued under case no. 3151-21.

In summary, the most significant changes to the operations at this facility concern the enhanced onsite lead monitoring program currently in effect. Exide was issued an addendum to the Rule 1420 compliance plan on December 12, 2008. This addendum provided specific coordinate locations for onsite monitor locations. Two of these monitor locations have measured significantly elevated lead concentration measurements (greater than 1.5 ug/m<sup>3</sup>). In addition, Exide has received several related Notice of Violations, including most recently, NOV No. P49868, issued on 4/2/2009 for violation of Rule 1420 (d)(1). This NOV was issued because the ambient lead concentration at the fence line of this facility has recently averaged more than 1.5 ug/m<sup>3</sup> on a rolling 30 day average.

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The following table provides the most recent chronology of events at this facility regarding the start and implementation of enhanced lead abatement and monitoring practices.

DATE	DESCRIPTION
5/7/2008	Rule 1420 compliance plan was issued under A/N 481923. This application was needed to add specific measures required to bring this facility into compliance with the State and Federal Ambient Air Quality Standard for lead after several months of non-compliance.
5/13/2008	The AQMD's Executive Officer issued an Executive Order requiring this facility to reduce the process weight of materials charged to the cupola and reverberatory furnaces at this facility by 50%. This facility appealed the issuance of the conditions related to this order under case no. 3151-18. In addition, a variance petition from these conditions (C1.2 and C1.3) was submitted under case no. 3151-19. The initial date of these hearings was 6/19/2008
10/22/2008	The pot furnace burners were identified as sources of lead emissions in a source test conducted by the AQMD.
11/25/2008	Hearing Board issued a minute order revoking the special permit conditions issued to Exide on May 13, 2008.
12/12/2008	Exide was issued an addendum to the Rule 1420 compliance plan. This addendum provided specific coordinate locations for onsite monitor locations. Two of these monitor locations have measured significantly elevated lead concentration measurements (greater than 1.5 ug/m <sup>3</sup> ). In addition, Exide has received several related Notice of Violations, including most recently, NOV No. P49868, issued on 4/2/2009 for violation of Rule 1420 (d)(1). This NOV was issued because the ambient lead concentration at the fence line of this facility has recently averaged more than 1.5 ug/m <sup>3</sup> on a rolling 30 day average.
1/22/2009 to 3/23/2009	One onsite ambient lead monitoring station (the north monitor) has had fluctuating results since 1/22/2009 and these results began to exceed the 30 day average standard of 1.5 ug/M <sup>3</sup> on or about 3/23/2009.
3/13/2009	496416 received for addition of the venting of 14 pot furnace burner exhausts and one building overhead hood to the reverberatory furnace feed room dust collectors (devices C156, C157, S158).  496418 (central vacuum A - devices C48, C159, C160, D161, S142) and 496419 (central vacuum B - devices C162, C163, D164) received for the deletion of the venting on one building overhead hood from the common exhaust system of the cupola feed room baghouse serving 2 plant central vacuum systems, and the transfer of this ventilation point to the dust collectors of A/N 496416.  496420, 496421, 496423, 496424, 496425, 496426, 496428, 496429, 496432, 496433, 496434, 496435, 496437, 496438 received to vent the burner compartments of 14 pot furnaces to the dust collectors of A/N 496416. This

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3/13/2009 (cont.)	alteration is intended to prevent the accidental discharge of uncontrolled lead emissions in the event of a pot furnace vessel malfunction. (devices D11, D13, D15, D17, D19, D24, D26, D28, D30, D32, D34, D36, D7, D9)
4/9/2009	Exide voluntarily reduces process feed rate to 75 percent of the permit limits until the company can determine that interim measures are achieving reductions of the lead concentrations at the fence line monitors. Measures include temporary enclosure of the battery breaking area raw material preparation system (RMPS) charging hopper.
06/25/2009	Stipulated Order for Abatement under case no. 3151-21 is heard by the Hearing Board. Exide agrees to perform certain remediations of their operation to further reduce lead emission concentrations at the fence lines of this facility in order to comply with Rule 1420 (d) and the State and National AAQS for lead emissions.
7/2/2009	Hearing Board issues Findings and Decisions approving stipulated O/A under Case No. 3151-21. It contains the requirements for the submittal of the permit applications in this project.
1/14/2010	Meeting held with Exide. Ed Mopas submits source test reports, including reports indicating that the South Torit dust collector tested with an efficiency of 96%, and the MAC dust collectors tested with an efficiency of 97.6%. The lead emission rate at the outlet of the MAC dust collectors was below detection limits.
1/20/2010	Memo sent to the AQMD source test evaluation group requesting evaluation of the Rule 1420 source test reports submitted by Exide on 1/14/2010.
1-22-2010	Exide files Hearing Board petition covered by case no. 3151-22. Variance relief is sought for possible violations of Rule 1420 with regard to the South Torit and MAC dust collectors. Petition also indicates that South Torit was repaired and retested for engineering purposes and found to now have 99.8% efficiency. Official Rule 1420 re-tests are pending.
1-28-2010	Exide files Hearing Board petition covered by case no. 3151-23. Variance relief is sought for possible violations of Rule 1420(d) with regards to the lead ambient monitor periodic high readings. Exide requests this variance to cover period of time required by the District to issue Permits to Construct to cover the RMPS Total Enclosure permit. Exide complains that temporary tarps around battery breaking area are near the end of their useful life.
1-29-2010	Email from Jay Chen indicates concurrence with the additional information submitted by Exide on 1-29-2010, as indicated above.
2-12-2010	Exide submits preliminary results of new source tests on the South Torit dust collector showing an average control efficiency for lead equal to 99.6 %.
2-15-2010	AQMD source test evaluation group completes evaluation of the source test reports for Rule 1420 compliance previously submitted by Exide. The source test reports are approved (with regards to testing methods used.)



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**PROCESS DESCRIPTION**

Exide Technologies is a secondary lead smelter. The subject permit applications were submitted to comply with conditions in the Order for Abatement issued under Hearing Board Case No. 3151-21 on July 2, 2009. Descriptions are provided below for the purpose of each permit application belonging to this project.

**A/N 500783 RMPS TOTAL ENCLOSURE APPLICATION**

Exide has proposed to construct building enhancements to the existing RMPS building at Exide. Specifically, additional walls will be constructed as follows:

1. The North West corner of the building where the battery crusher hopper is located
2. The battery scrap/mud settling/separator tanks located on the West wall at the North end of the building.
3. Any other openings in the structure which currently exist and which result in this building currently being only a partial enclosure.

This building is approximately 329 feet long from North to South. It includes the battery crusher hopper room which Exide refers to as the RMPS building, the reverb feed room next to the RMPS room, and a mud feed room located on the south side of the reverb feed room. This south room is adjacent to the south corridor building which connects the RMPS structure on the west side of this facility with the smelter building on the east side of this facility. The following aerial view illustrates this arrangement.

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For the purpose of this permit modification, the RMPS, reverb feed, and mud/wet feed rooms will all be classified as the "RMPS building". The permit unit dimensions include the total final width and length after the building extensions to enclose the "mud tanks" on the Northwest side of this structure.

**A/N 500784 APCS 13 (C156, C157) CONNECTION TO RMPS TOTAL ENCLOSURE**

An application for a P/C to fully-enclose the Raw Materials Preparation System (RMPS) building was submitted to the SCAQMD on July 16, 2009. This application was submitted pursuant to OA condition 3a to vent the RMPS to APCS 13 to control fugitive dust.

Exide designed the building so that it would meet the face velocity requirements as specified in OA condition 3c. The fully-enclosed RMPS building will continue to be vented to APCS 13 (devices C156 and C157).

This final configuration will allow the RMPS building to meet the negative pressure requirements of 0.02 mm of Hg and the in draft velocity of 300 feet per minute through all openings to the outside.

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Refer to the section regarding A/N 501057 for further discussion.

**A/N 500786 NEW ROTARY DRYER BAGHOUSE SPARK ARRESTOR**

The AQMD has suspected in the past that hot embers formed in the rotary dryer furnace may be periodically impinging on the filter bags inside the rotary dryer baghouse. If this occurs, the filtering efficiency of the rotary dryer baghouse will be compromised, possibly resulting in the release of higher lead emissions due to burned pinholes in the filter bags. In order to lower the probability of the occurrence of this potential problem, the OA has required the installation of a spark arrestor pursuant to condition no. 9.

A computer controlled spark arrestor system is proposed to be installed between the rotary dryer cyclone separator (device C143) and the rotary dryer baghouse (device C144). The spark arrestor will be equipped with an infrared optical detector and a water wash curtain sprayer, with a precision timing trigger which takes into account the distance between the spark detector and the water spray nozzles. In this process, the water spray nozzles will be signaled to inject a short burst of water spray following a detection of a spark upstream by the infrared detector. The water spray burst is short enough to prevent the filter bags downstream from becoming wet from the water spray.

**A/N 501056 SMELTING AND REFINING BUILDING TOTAL ENCLOSURE**

This application will be used to issue a permit for the existing smelting/refining and south corridor building total enclosures at Exide. This permit application is required to add permit conditions which will require triplicate building negative pressure monitors and recorders in the smelting building, in accordance with the Order for Abatement, and to add a permit condition for a single building negative pressure monitor in the south corridor building, also equipped with a chart recorder.

After examining the situation at this facility, it has been decided to require a single negative pressure monitor and chart recorder for buildings with less than 10,000 square feet of surface area. For buildings larger than this size, triplicate monitors are required (i.e., the term "Leeward wall" has less meaning or applicability to very large buildings due to shifting wind patterns.)

**A/N 501057 RMPS SCRUBBER ALTERATION**

The ambient air in the RMPS building is also vented by the APCS 9 scrubber (device C165) due to the fact that the hopper for the battery crusher is located in the RMPS room. When the RMPS

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building is extended to cover the mud tanks on the west side of the current structure, the ventilation capacity allocated to these tanks currently, will also affect the total ventilation inside the final totally enclosed RMPS building.

The RMPS scrubber has a relatively low exhaust gas flow rate, compared to other APCS systems at this facility. In order to enhance the exhaust capacity of this scrubber, Exide is proposing to increase the motor horsepower and blower capacity of the existing blower installed on this scrubber. The current motor rating is 40-H.P. This is being increased to 100-H.P.

The applicant has submitted an air flow allocation chart showing combinations of open and closed doors with stated open surface areas which will show compliance with the lead NESHAP in draft flow requirements to allow the RMPS building to meet the negative pressure requirements of 0.02 mm of Hg and an indraft velocity of 300 feet per minute through all openings to the outside.

An examination of the proposed exhaust capacity distribution for APCS 13 indicates that the total number of hoods allocated to the RMPS building (the total building) will increase from nine overhead hoods to ten overhead hoods. In addition, this dust collector vents two overhead hoods in the south corridor building and 14 pot furnace burner exhausts. This dust collector appears to be slightly over-extended with regards to the total number of ventilation points allocated to it.

Exide previously installed and operated the subject scrubber to control emissions from the battery breaker and RMPS system. Rule 1420 source tests were performed and failed to demonstrate a minimum control efficiency of 98% for lead emissions. HEPA filters were added to this system and the tests were performed again. The second round of tests demonstrated compliance with this performance standard in Rule 1420. Refer to the Belinda Wan report dated 10/24/2006 for more details. This permit application adds the description of the HEPA filter to the permit description.

A/N 501057 supersedes the previous open permit application for this scrubber, A/N 374250, received 8/31/2000 for change of ownership/alteration to APCS No. 9 by the addition a HEPA filter mist eliminator to this system. The current permit application will add the HEPA filter and the 100-H.P. blower descriptions to this permit unit.

The previous permit application, A/N 374250, will be concurrently cancelled with the processing of A/N 501057.

Since the air flow rate of the subject scrubber is being increased, a new set of Rule 1420 source tests will be required to demonstrate 98 percent control of lead emissions.

Verification, and enforcement, of compliance with the lead NESHAP building negative pressure requirements will be accomplished with triplicate negative pressure measuring systems equipped

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with chart recorders.

**A/N 501059 ROTARY DRYER TOTAL ENCLOSURE**

This application is submitted to install a smaller total enclosure building around the rotary dryer furnace and dryer transition/material conveying devices. This building will be vented to the baghouse of APCS 5 -- hard lead pot furnace baghouse.

A single pressure gauge and chart recorder will be used to verify and enforce compliance with the negative pressure requirements of the lead NESHAP in the rotary dryer building.

**A/N 501060 APCS 5 POT FURNACE BAGHOUSE ADD CONNECTION TO ROTARY DRYER ENCLOSURE**

The purpose of this permit application is to connect the new rotary dryer building to the pot furnace of APCS 5 in order to produce a negative pressure of 0.02 mm of Hg and an in draft velocity of 300 feet per minute through all openings to the outside to comply with the lead NESHAP.

**A/N 501061 NEW VEHICLE WASH STATION**

The proposed vehicle washing station is required by the O/A issued under HB Case No. 3151-20 in order to prevent the release of fugitive lead emissions due to vehicle traffic inside the facility and to prevent the tracking of lead material outside this facility.

Vehicle washing stations are (normally) administratively exempt from written permit requirements under Rules 201 and 203. However, the lead NESHAP 40CFR63 Subpart X has requirements for record keeping as indicated in § 63.545 (Standards for fugitive dust sources). The following excerpt in bold type from the NESHAP summarizes these requirements:

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[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

**§ 63.545 Standards for fugitive dust sources.**

(c) The controls specified in the standard operating procedures manual shall at a minimum include the requirements of paragraphs (c)(1) through (c)(5) of this section, unless the owner or operator satisfies the requirements in paragraph (f) of this section.

(5) Materials storage and handling area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, **vehicle wash at each exit from the area**, and paving of the area; or total enclosure of the area and ventilation of the enclosure to a control device, and a vehicle wash at each exit.

(d) **The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.**

Since the primary purpose of the washing station is to prevent exceedances of the National Ambient Air Quality Standard (NAAQS) for lead, which is has a concentration limit which is becoming more stringent (from 1.5 ug/m3 to 0.15 ug/m3), and since the lead NESHAP has requirements for record keeping, it is recommended that a written Permit to Construct be required for this system in order add permit conditions to ensure compliance with these two Federal requirements, and in order to ensure compliance with Rule 1420 (d).

**HEPA VACUUM SWEEPER**

Exide plans to operate a portable hand-push vacuum sweeper that is equipped with a HEPA filter to sweep the outside areas of the facility, as is required by its current Rule 1420 compliance plan (approved May 7, 2008). According to the applicant, the vacuum sweeper is battery powered and is equipped with a hopper that has a capacity of 3 cubic feet for large debris. The air is filtered first through a perma-filter screen, and then followed by a panel filter that has a 92% control efficiency for particles with a diameter of 3 micrometers, and finally through a HEPA filter that has a 99.97% control efficiency for particles with a diameter of 0.3 micrometers. Due to the small size of this sweeper, Exide plans to use this sweeper in areas that are difficult to reach with the other sweepers that Exide currently operates.

**EVALUATION**

**CEQA**

There are no emissions increases resulting from the proposed alterations and change of conditions. Therefore a CEQA evaluation is not required in this case.

**RULE 212**

There are no emissions increases and no increases in health risk resulting from the proposed alterations and change of conditions. Therefore a Rule 212 public notice is not required in this case.

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RULE 401

Operation of the subject equipment is not expected to cause visible emissions in excess of the limits in this rule. Therefore, compliance is expected.

RULE 402

Since the process equipment is vented to baghouses and scrubbers at this facility, nuisance complaints due to dust and odors is not expected during normal operation of the subject equipment at this facility. Any nuisance complaints resulting from process upset conditions (if any) will be handled by AQMD Compliance staff.

RULE 404

Previous evaluations have shown compliance with the particulate concentration limits in this rule.

RULE 405

Previous evaluations have shown compliance with the particulate emission limits in this rule.

RULE 1401

There is no health risk increase resulting from this set of applications. Therefore, compliance with this rule is expected.

RULE 1420

Previous source tests have demonstrated that all APCS equipment at this facility has at least 98% control efficiency on lead emissions, except for the South Torit dust collector and the MAC dust collectors. These APC systems performed at lead control efficiencies of 96% and 97.5%, respectively. They were both out of compliance with Rule 1420.

However, the two non-compliant APC systems currently being retested to demonstrate compliance. The retest on the South Torit dust collector shows preliminary results showing 99.5% and the retests for the MAC dust collectors are pending.

The retests are being performed after equipment reinspections and repairs. Both APC systems are expected to comply with Rule 1420 after the official retest reports are submitted.

New Rule 1420 source tests will be required for the RMPS scrubber since the blower capacity is being increased.

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40CFR60 Supart X (LEAD NESHAP)

The RMPS building at this facility will be equipped with negative pressure differential gauges to ensure compliance with the total enclosure negative pressure requirements in this rule. The APC systems have been previously tested and found to be in compliance with the lead concentration limits in this rule. Therefore, compliance with the lead NESHAP has been demonstrated.

REGULATION 30, TITLE V

Exide is proposing to convert the RMPS **partial** enclosure building into a **total** enclosure building. By doing this, additional lead NESHAP monitoring requirements are triggered.

Rule 3000 (b)(28)(I) states that a significant revision includes:

*installation of new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63; or,*

Specifically, any gases leaving the proposed total enclosure building cannot have a lead concentration greater than 2.0 mg/dscm (per the **fugitive** emissions requirement for **total** enclosures stated in the lead NESHAP). The only way to ensure compliance with this requirement is to prevent the release of uncontrolled gases through negative pressure monitoring (as required for **process** fugitive total enclosures in the lead NESHAP).

Since additional lead NESHAP requirements are now applicable, this project has to be classified as a significant revision under Rule 3000. A public notice and a 45 day EPA review is required.

CAM

CAM requirements pertain to the requirements of 40 CFR 64, Continuous Assurance Monitoring. The CAM rule contains specific federal monitoring requirements for process equipment which is vented by air pollution control systems where the facilities which are major sources, as defined in Title V (Reg 30). Permit conditions currently ensure compliance with CAM requirements. The following APC systems in operation at Exide are subject to CAM requirements. These APC systems have the following conditions associated with them:

APCS	Device ID	REQUIRED CONDITIONS
APCS #1 Reverb furnace baghouse	C40, C41	C6.3, D12.5, D12.6, D12.11, D381.1, E102.1, E193.1, H116.1, H116.2, H116.4, K67.2
APCS #2 Blast furnace baghouse	C45	C6.3, D12.5, D12.6, D12.11, D381.1, E102.1, E193.1, H116.1, H116.2, H116.4, K67.2



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APCS	Device ID	REQUIRED CONDITIONS
APCS #5 Hard lead (pot furnace) baghouse	C46	D12.6, D12.7, D12.10, D12.11, D381.1, E102.1, H116.1, H116.2, H116.4, K67.3, E193.1
APCS #6 Soft lead (pot furnace) baghouse	C47	D12.6, D12.7, D12.10, D12.11, D381.1, E102.1, H116.1, H116.2, H116.4, K67.3, E193.1
Rotary dryer baghouse	C144	C6.2, D12.5, D12.6, D381.1, E102.1, E193.1, H116.1, H116.2, H116.4, K67.2
Blast/Reverb Furnace Common Stack Outlet	S139	A63.1, D82.1, D323.1, K67.9

**DISCUSSION**

There are no emission increases expected with regards to the subject permit applications. The conversion of the RMPS building to a total enclosure is expected to result in a decrease in fugitive emission levels. This decrease is not quantifiable. However, the effects of this change should become apparent in the lead concentration data produced by the ambient air monitors surrounding this facility.

The amount of air capacity increases proposed for the RMPS building do not appear to be significant, considering the existing amount of air flow rate currently allocated to the RMPS building. Portions of this building are already vented by the dust collectors of APCS 13. Exide is proposing to add one more hood connected from this control system to the RMPS building. APCS 13 exhausts approximately 80,000 DSCFM according to AQMD source test data. This APCS has a total of 11 overhead hoods. Two hoods are in the south corridor building and 9 hoods are in the RMPS building. On additional hood, for a total of 12 hoods, will be installed in the battery crusher room in the RMPS building. If it is assumed that the air flow rate will be apportioned evenly across all hoods, this means that approximately 6700 CFM will be allocated to the ventilation in the RMPS building. This is enough flow rate to produce a 300 ft/min indraft velocity in a 4-1/2 ft x 5 ft opening. This is about 1/2 of a man door.

However, after the modifications are completed, there will be approximately 67,000 DSCFM total allocated to this building from APCS 13. Therefore, the APCS 13 modification will increase the air flow rate in the RMPS by about 10%, and decrease the air flow rate in the south corridor building by this same amount.

Exide is also proposing to increase the blower horsepower rating from 40 H.P. to 100 H.P. for the RMPS scrubber to increase ventilation in this building. This scrubber does not provide a relatively large air flow rate in comparison with APCS 13. The scrubber was tested by the AQMD and found to have a 6890 DSCFM flow rate. If 12,000 CFM is required to produce a 300 ft/min. indraft in a typical 4 ft x 10 ft door, the scrubber produces enough flow rate for about 1/2 of a man door. Together, the additional air flow rate expected from APCS 13 and the

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scrubber is currently sufficient to ensure adequate flow rate for one additional man door. Compared to the whole RMPS building, this is a relatively insignificant amount.

Exide has provided two tables that indicate that approximately 22,000 CFM is required under certain scenarios to provide sufficient air flow rate to produce the required 300 ft/min indraft velocity for lead NESHAP compliance. Since the expected air flow rate into the entire RMPS building will be approximately 67,000 CFM + 6890 CFM = 73890 CFM, the proposed building and door configuration should have far more air flow capacity than theoretically required (by a factor of almost 3.5:1). Therefore, compliance with the lead NESHAP ventilation requirements for a total enclosure is expected.

Compliance with building negative pressure requirements is based on the assumption that most of the doors in the building will be kept closed during normal operations. The applicant was asked to verify that compliance can be achieved with the NESHAP building requirements. The applicant provided the following response in a 1/29/2010 email message:

“Open surface area in RMPS building

- a. As you mentioned, the total area for doors in the proposed building is 776 square feet, but the chart in our application shows that the expected open area is only 72.9 square feet based on work done by Environ International Corporation and Exide Technologies.
- b. The majority of the 776 square feet is made up of personnel doors and a maintenance rollup door.
  1. The personnel doors will be outfitted with automatic door closers and will only be open long enough for a person to walk through.
  2. The maintenance door will only be used to transport equipment into and out of the room for repairs and will remain closed all other times.
  3. Since the doors will be predominately closed, we did not use their areas in the velocity calculations.
- c. As for potential permit language, we would recommend something that reflects the likely operating circumstances such as
  1. “Doors to remain closed except for short periods of time for ingress and egress of personnel and/or equipment to pass through”. “

Based on the response from the applicant, compliance is expected. The suggested permit condition language will be added to the Facility Permit to ensure compliance.

In the final analysis, the ambient air monitors will be the indicators of the final state of the containment buildings, among other factors. They will provide feedback data to allow Exide to identify and correct any remaining problems.

The increase in the maximum air flow rate through the scrubber will be limited by factors such as potential flooding in the packed bed scrubber section. Too much wet mist caused by high scrubber air flow rate can overwhelm the HEPA filter section downstream in this control system. For this reason, and in order to ensure that the HEPA filter section does not become plugged due to excess wet mist, a standard pressure drop limit of 3 inches water column is proposed for the HEPA filter section in the RMPS APCS.

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Since the air flow rate characteristics are being altered in the RMPS scrubber APCS, a new set of Rule 1420 tests will be required to ensure compliance with the 98% lead control requirement in this rule.

Permit conditions are required to ensure compliance with all applicable Rules and Regulations.

RECOMMENDATION

APPLICATION NO. 374250

Cancel with no refund. This application is superseded by A/N 501057.

APPLICATION NOS. 500785, 501055

Cancel with partial refund. These applications are superfluous.

APPLICATION NO. 500782

Approve Title V Facility Permit modification

APPLICATION NOS. 500783, 500784, 500786, 501056, 501057, 501059, 501060, 501061, 501062

Issue Permits to Construct subject to the following Facility Permit modifications and change of conditions in Section H::

1. Add new devices, modify device descriptions, add device connections, and add new permit conditions as indicated in the tables below for the described Processes and Systems:

(Note: additions and changes are **shaded** and indicated in **bold type**)

APPLICATION NO. 500783 RMPS BUILDING ENCLOSURE AND MODIFICATION OF APC 9

Process 1 : Secondary Metals, Lead Smelting Process			
System 1 : Raw Material Preparation System (RMPS)		(NEW)	
Equipment	ID No.	Connected To	Conditions
ENCLOSURE, BUILDING, RAW MATERIAL PREPARATION SYSTEM, 124'-8"W. X 329'-0"L. X 75'-0"H., APPROXIMATE DIMENSIONS.	<b>C175</b>	<b>C156 C157 C165</b>	<b>E448.2</b>

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APPLICATION NO. 500784 APCS 13 MODIFICATION:

Process 1 : Secondary Metals, Lead Smelting Process			
System 10 : Reverb Furnace Feed Room APCS			
Equipment	ID No.	Connected To	Conditions
BAGHOUSE, NO. 1, MAC, MODEL 144MCF494, CARTRIDGE-TYPE, WITH A 150 HP BLOWER AND A BROKEN FILTER DETECTOR, 494 CARTRIDGE	C156	D7, D9, D11, D13, D15, D17, D19, D24, D26, D28, D30, D32, D34, D36, D109, D110, D111, D112, D113, D151, S158, <b>C175, C182</b>	C6.4, D12.9, D12.13, D12.15, D12.16, D182.2, D381.1, E102.1, H116.1, H116.4, K171.1
BAGHOUSE, NO. 2, MAC, MODEL 144MCF494, CARTRIDGE-TYPE, WITH A 150 HP BLOWER AND A BROKEN FILTER DETECTOR, 494 CARTRIDGE	C157	D7, D9, D11, D13, D15, D17, D19, D24, D26, D28, D30, D32, D34, D36, D109, D110, D111, D112, D113, D151, S158, <b>C175, C182</b>	C6.4, D12.9, D12.13, D12.15, D12.16, D182.2, D381.1, E102.1, H116.1, H116.4, K171.1
STACK, HEIGHT: 80 FT; DIAMETER: 6 FT	S158	C156, C157	D381.1

APPLICATION NO. 500786 DRYER BAGHOUSE SPARK ARRESTOR

Process 1 : Secondary Metals, Lead Smelting Process			
System 2: Feed Drying System			
Equipment	ID No.	Connected To	Conditions
BAGHOUSE, WITH 100-H.P. BLOWER, WITH EXPANDED TEFLON MEMBRANE BAGS WITH TEFLON SUBSTRATES, 5881 SQ. FT.; 312 BAGS	C144	C143 S145	C6.2, D12.5, D12.6, D381.1, E102.1, E193.1, H116.1, H116.2, H116.4, K67.2
<b>INJECTOR, SIDEWALL WATER SPRAY, WITH 2 FLAMEX F180 NOZZLES, WITH SPARK ARRESTOR CONTROLLER, FLAMEX MODEL FMZ 4100 GAB 24, A BATTERY BACK-UP, AND 8 FLAMEX FUX 3001-E OPTICAL INFRARED SPARK DETECTORS</b>	<b>B176</b>		<b>E448.6</b>
STACK, HEIGHT: 69 FT; DIAMETER: 3 FT	S145	C144	

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APPLICATION NO. 501056 SMELTER BUILDING ENCLOSURE

Process 1 : Secondary Metals, Lead Smelting Process			
System 6 : Fugitive Dust Control System		(NEW)	
Equipment	ID No.	Connected To	Conditions
ENCLOSURE, BUILDING, SMELTING AND REFINING, 140 FT W. X 500 FT L. X 25 FT H., APPROXIMATE DIMENSIONS.	C179	C38, C39	E448.2
ENCLOSURE, BUILDING, SOUTH CORRIDOR, 45 FT W. X 140 FT L. X 25 FT H., APPROXIMATE DIMENSIONS.	C182	C156, C157	E448.3

APPLICATION NO. 501057 RMPS SCRUBBER ALTERATION

Process 1 : Secondary Metals, Lead Smelting Process			
System 1 : Raw Material Preparation System (RMPS)			
Equipment	ID No.	Connected To	Conditions
SCRUBBER, PACKED BED, MAPCO, MODEL MW-100-24, WITH 2 FT PACKING, 4 IN THICK MESH PAD, CHEVRON TYPE MIST ELIMINATOR, 100 HP BLOWER, WIDTH: 11 FT 2 IN; HEIGHT: 8 FT 3 IN; LENGTH: 15 FT	C165	D1 D2 D3 D4 D5 C172 C175	C8.4, D12.12, D182.1, D323.1, H116.3, K171.2
MIST ELIMINATOR, HEPA, MAPCO, MODEL MW-100-24, WITH 16 HEPA FILTERS, EACH 2'-0"W. X 2'-0"L. X 0'-11.5" THICK	C172	C165, S166	D12.14, D182.1, D323.1, H116.3, K171.2

APPLICATION NO. 501059 Rotary Dryer Furnace Enclosure

Process 1 : Secondary Metals, Lead Smelting Process			
System 2: Feed Drying System		(NEW)	
Equipment	ID No.	Connected To	Conditions
ENCLOSURE, BUILDING, ROTARY DRYER FURNACE, 15'-0"W. X 45'-0"L. X 17'-0"H., APPROXIMATE DIMENSIONS.	C177	C46	E448.3

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APPLICATION NO. 501060 APCS 5 modifications:

Process I : Secondary Metals, Lead Smelting Process			
System 8: Cupola and Hard Lead Refinery Furnaces APCS			
Equipment	ID No.	Connected To	Conditions
BAGHOUSE, WITH 450 HP BLOWER, 64000 SQ. FT.	C46	D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D129 D130 D131 D132 D133 S140 <b>C177</b>	D12.6, D12.7, D12.10, D12.11, D381.1, E102.1, H116.1, H116.2, H116.4, K67.3.

APPLICATION NO. 501061 Vehicle Wash Station

Process 3: Waste Handling			
System 11: Vehicle Wash System		(NEW)	
Equipment	ID No.	Connected To	Detailed Equipment Description
<b>TRUCK WASHING STATION, VEWI, MODEL TW-2000, , 11'-6"W. X 67'-1"L. X 3'-6"H., WITH A WASH BASIN, 11'-6"W. X 37'-0.5"L. X 3'-6"H.</b>	<b>D178</b>		<b>E448.5</b>
<b>ENCLOSURE, WASH STATION TUNNEL, 20'W. X 38'L. X 20'H. APPROXIMATE DIMENSIONS</b>	<b>C180</b>		

APPLICATION NO. 501062 Vacuum Sweeper

Process 3: Waste Handling			
System 12: Portable Vacuum Sweeping System		(NEW)	
Equipment	ID No.	Connected To	Conditions
<b>FLOOR SWEEP, WALK BEHIND VACUUM SWEEPER, WITH A HEPA FILTER, LEAD ABATEMENT, TENNANT, MODEL 3640E, 2'-8"W. X 4'-8"L. X 3'-2"H., 1-H.P. ELECTRICALLY POWERED.</b>	<b>C181</b>		<b>E448.4, K171.3</b>

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2. Add all existing permit conditions, as required, for new devices appearing in Section H as a result of the current changes.
3. Add existing condition no. H116.4 to device nos. C40, C41, C45, C46, C47 in sections D and H, in order to make the permit consistent.
4. Add existing condition no. E193.1 to device nos. C40, C41, C45, C46, C47 in sections D and H, in order to make the permit consistent.
5. Add the following new or modified permit conditions to Section H:

(MODIFIED)

D12.14 The operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the HEPA filter mist eliminator, in inches water column.

The pressure differential across the HEPA filter mist eliminator shall not exceed 3.0 inches water column.

[RULE 1303(a)(1)-BACT, RULE 1420]  
[Devices subject to this condition : C172]

(MODIFIED)

D182.1 The operator shall test this equipment in accordance with the following specifications:

- A) The test(s) shall be conducted and a written report submitted to the AQMD not later than 180 days of the construction of the enclosure of RMPS building and installation of the exhaust system including the 100 h.p. exhaust exhaust blower and associated ductwork.
- B) The test(s) shall measure the emissions of lead at the inlet of the scrubber and the outlet of the HEPA filters. Triplicate source tests shall be conducted simultaneously on the inlet and outlet in accordance with the requirements set forth by Rule 1420 (e)(2).
- C) Triplicate source tests shall be conducted for exhaust gas lead concentration in the HEPA filter exhaust outlet, pursuant to 40CFR 63 Subpart X. The outlet tests in part B of this condition may be used to fulfill this requirement if equivalency in testing methods can be demonstrated to satisfy the requirements of both rules.
- D) The tests shall be conducted while the Raw Material Preparation System is operated under normal operating conditions.

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- E) The source tests shall be performed by a qualified testing laboratory and conducted in accordance with acceptable district procedures.
- F) The Rule 1420 source tests shall be conducted by a qualified testing contractor approved for Rule 1420 testing.
- G) Written notice shall be provided to the AQMD at least 10 days prior to testing so that an AQMD observer may be present during the tests, if the AQMD decides to have an observer present.
- H) Sampling facilities shall comply with the District "guidelines for the construction of sampling and testing facilities", pursuant to rule 217.
- I) Written results shall be submitted to the AQMD within 60 days after testing.

[RULE 1420]

[Devices subject to this condition : C165, C172]

(NEW)  
E448.2

The operator shall comply with the following requirements:

Exide shall install and maintain at least three (3) separate pressure differential monitoring systems inside the Total Containment Building so as to measure the negative pressure differential between the internal building atmosphere and the external atmosphere at all times. Each of these systems shall be operated pursuant to the following requirements:

- A. Each building pressure differential monitoring system shall be equipped with a continuous chart recorder.
- B. A minimum of one (1) building pressure differential monitoring system shall be installed at each of the following three (3) walls in the Total Containment Building.
  - 1. Leeward wall inside of the Total Containment Building in accordance with 40 CFR 63 Subpart X.
  - 2. The inside wall of the building opposite the leeward wall.



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3. An inside wall location defined by the intersection of a perpendicular line between this wall and within plus or minus ten (10) meters of the midpoint of a straight line between the two other monitors described in Subparts (B)(1) and (B)(2) of this condition. For the purpose of this condition, the midpoint monitor shall NOT be located on the same walls as any of the other two monitors described in this condition.

- C. The total open area of the RMPS total enclosure building shall not exceed 72.9 square feet, except for:

1. Solid doors opened during ingress and egress of personnel.
2. The maintenance door opened during transport of equipment used for repairs.

[RULE 1420]

[Devices subject to this condition : C175, C179]

(NEW)  
E448.3

The operator shall comply with the following requirements:

Exide shall install and maintain at least three (1) pressure differential monitoring system(s) inside the Total Containment Building so as to measure the negative pressure differential between the internal building atmosphere and the external atmosphere at all times. These system(s) shall be operated pursuant to the following requirements:

- A. Each building pressure differential monitoring system shall be equipped with a continuous chart recorder.
- B. A minimum of one (1) building pressure differential monitoring system shall be installed at the Leeward wall inside of the Total Containment Building in accordance with 40 CFR 63 Subpart X.
- C. Building doors shall remain closed except for short periods of time required for ingress and egress of personnel and/or equipment into, and out of, the Total Enclosure Building.

[RULE 1420]

[Devices subject to this condition : C177, C182]

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(NEW)  
E448.4

The operator shall comply with the following requirements:

- 1) The HEPA filters used in this equipment shall be certified by the manufacturer to have a minimum control efficiency of 99.97 percent on 0.3 micron particles.
- 2) Dust collected in this equipment shall only be discharged into containers which shall be maintained closed after the disposal of dust from this equipment.
- 3) After use and/or whenever maintenance is performed on the HEPA vacuum sweeper, this equipment shall only be disassembled, emptied and/or cleaned within a total enclosure building which is vented to air pollution control system(s) which are in full use and which have been issued Permits to Construct and/or Operate by the Executive Officer of the AQMD.
- 4) Visible emissions shall not be discharged from any point on this equipment.
- 5) Identification tag(s) or name plate(s) shall be displayed on this equipment to show manufacturer model no. and serial no. The tag(s) or name plate(s) shall be affixed to this equipment in a permanent and conspicuous location.

[RULE 1420]

[Devices subject to this condition : C181]

(NEW)  
E448.5

The operator shall comply with the following requirements:

- 1) Exide shall install and maintain the vehicle washing facility on the south side of its premises for the purpose of washing all vehicles leaving the process plant areas. This shall not include vehicles entering by the north entrance and picking up finished lead without entering the process areas.

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- 2) Vehicles shall be cleaned by using a wet washing method. A record keeping system (with written documentation) that is acceptable to the District shall be developed for quality control inspections of each vehicle leaving the wash station to assure that the vehicle has been thoroughly washed. Written reports of each inspection shall be prepared and maintained from each shift. No vehicle shall exit the facility without passing inspection.
- 3) The vehicle washing facility shall employ best practices for collecting and disposing of lead contaminated water accumulated during the washing process. Those practices shall include the minimization of the amount of water which is allowed to dry exposed to atmosphere prior to collection for treatment.

[RULE 1420]

[Devices subject to this condition : D178]

(NEW)  
E448.6

The operator shall comply with the following requirements:

- 1) The spark arrestor system shall be in full operation whenever the rotary dryer baghouse (device C144) is in operation.
- 2) The spark arrestor system shall be tested and calibrated not less than once per year, and more often if necessary, to ensure the system is functioning properly.

[RULE 1420]

[Devices subject to this condition : B176]

(NEW)

K171.2 The operator shall provide to the District the following items:

- A) Two (2) copies of the test plan shall be submitted to the Refinery and Waste Management Permitting Unit, Engineering and Compliance, not less than 60 calendar days prior to the initial test date and shall be approved by the district before the tests commence. The plan shall include the proposed operating conditions of the equipment during each test run.

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- B) The total amount, in tons, of all materials charged to the battery crusher during each test run shall be recorded. The measuring period for determining the process weight of throughputs shall include the period during which the test run occurred. This requirement shall apply to each test run.
- C) A test plan shall be submitted for District approval, and it shall include the following:
1. The identity of the testing laboratory.
  2. A statement from the testing laboratory certifying it meets the criteria in District Rule 304 (k).
  3. A list of contaminants to be tested.
  4. Testing procedures for each contaminant and a description of all sampling and analytical procedures to be used.
  5. Location of points of sampling.
  6. Quality assurance measures.
  7. Experience in testing procedures.
  8. Date(s) and time(s) of commencement of the test(s).
- D) The source tests shall be completed, and a final report submitted to the District, not later than 180 days after the installation of the new 100-H.P. exhaust blower is completed.

[RULE 1420]

[Devices subject to this condition: **C165, C172**]

(NEW)

K171.3 The operator shall provide to the District the following items:

The operator shall keep and maintain the following information and provide it upon request of District personnel.

- 1) The information required by condition E448.4 part 5.
- 2) The number of working hours per day involving lead removal.
- 3) The date and time of each HEPA filter replacement.
- 4) A copy of the manufacturer's certification of efficiency for the HEPA filter(s).

[RULE 1420]

[Devices subject to this condition : C181]



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## APPENDIX A



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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, California 91765

Test Nos. 08-273

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Date(s): 10/9, 10/10, 10/15,  
10/16, 10/22/08

**Table 2. Summary of Test Results for Lead Emissions (Based on Single Run Testing)**

Sampling Location	Test Date	Stack Flow Rate dscfm	Emissions Concentration		Mass Rate lb/hr	Allowable Limit* mg/dscm
			gr/dscf	mg/dscm		
South Torit Baghouse (C39)	October 9, 2008	70,600	$2.44 \times 10^{-4}$	0.558	0.148	2.0
North Torit Baghouse (C38)	October 9, 2008	81,300	$1.29 \times 10^{-4}$	0.296	0.0900	2.0
Hard Lead Baghouse (C46)	October 10, 2008	92,200	$2.40 \times 10^{-6}$	0.00550	0.0019	2.0
Soft Lead Baghouse (C47)	October 10, 2008	81,200	$6.20 \times 10^{-6}$	0.00142	0.00432	2.0
Kiln Dryer Baghouse (C144)	October 10, 2008	7,430	0.0119	<b>27.30</b>	0.759	2.0
Material Handling Baghouse (C48)	October 15, 2008	102,000	$7.50 \times 10^{-6}$	0.0172	0.00656	2.0
Venturi/Neptune Scrubbers (C42, C43)	October 16, 2008	20,300	$1.02 \times 10^{-5}$	0.0234	0.00178	2.0
MAC Baghouse (C156, C157)	October 16, 2008	79,800	$1.90 \times 10^{-5}$	0.0435	0.0130	2.0
Raw Material Prep. System Scrubber (C165, C172) <sup>#</sup>	October 22, 2008	6,890	$5.79 \times 10^{-5}$	0.133	0.00342	2.0
Kettle Burner Vent Stack	October 22, 2008	6,490	$4.41 \times 10^{-4}$	1.01	0.0245	2.0

Bold denotes emissions in excess of the allowable limit and also likely to cause exceedance of ambient air standard (see Test Critique)  
Rule 1420 allowable ambient concentration is  $1.5 \mu\text{g/dscm}$  at facility property line

\* Allowable emissions pursuant to 40 CFR 63 Subpart X - NESHAP from Secondary Lead Smelting

<sup>#</sup> Isokinetic sampling rate was greater than 110% (114%), results may have a minor low bias



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Date(s): 1/7/09, 1/8/09

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Test No. 09-280

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, California 91765

**Table 2. Summary of Test Results for Lead Emissions from the Kiln Dryer Baghouse**

Run No.	Test Date	Stack Flow Rate		Emissions Concentration		Mass Rate	Allowable Limit*
		dscfm	gr/dscf	mg/dscm	lb/hr		
1	January 7, 2009	10,100	$9.20 \times 10^{-4}$	2.11	0.080		
2	January 8, 2009	9,540	$1.10 \times 10^{-4}$	0.252	0.009		
3	January 8, 2009	9,580	$1.30 \times 10^{-4}$	0.297	0.011		
Average		9,740	$3.87 \times 10^{-4}$	0.886	0.033		2.0

Rule 1420 allowable ambient concentration is  $1.5 \mu\text{g/dscm}$  at facility property line

\* Allowable emissions pursuant to 40 CFR 63 Subpart X - NESHAP from Secondary Lead Smelting

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**RMPS Building Enclosure - Flowrate Calculations**  
Exide Technologies, Vernon facility (SCAQMD ID# 124838)

Calculation Factors

25% Open area through strip doors

**RMPS Building with Truck in Opening 1**

Opening	Height	Width	Area (sq in)	Area (sq ft)	Opening Type	Open?	Open Area (sq ft)
1 - above	24	144	3456	24	Strip Door	no	6.0
1 - left	156	21	3276	22.75	Strip Door	no	5.7
1 - right	156	21	3276	22.75	Strip Door	no	5.7
1 - below	36	102	3672	25.5	Open	yes	25.5
2	144	144	20736	144	Roll-up Door	no	0
3	192	144	27648	192	Solid Door	no	0
4	36	84	3024	21	Solid Door	no	0
Unloading dock left walkway	109	82	8938	62	Strip Door	no	16
Conveyor opening	24	50	1200	8	Open	yes	8
Unloading dock right walkway	84	28	2352	16	Strip Door	no	4
9	96	192	18432	128	Solid Door	no	0
10	24	24	576	4	Window	no	0
11	36	84	3024	21	Solid Door	no	0
<b>Total Area of Openings (sq ft)</b>							<b>70.8</b>
<b>Total cfm Required</b>							<b>21,243</b>

**RMPS Building without Truck in Opening 1**

Opening	Height	Width	Area (sq in)	Area (sq ft)	Opening Type	Open?	Open Area (sq ft)
1	180	144	25920	180	Strip Door	no	45
2	144	144	20736	144	Roll-up Door	no	0
3	192	144	27648	192	Solid Door	no	0
4	36	84	3024	21	Solid Door	no	0
Unloading dock left walkway	109	82	8938	62	Strip Door	no	16
Conveyor opening	24	50	1200	8	Open	yes	8
Unloading dock right walkway	84	28	2352	16	Strip Door	no	4
9	96	192	18432	128	Solid Door	no	0
10	24	24	576	4	Window	no	0
11	36	84	3024	21	Solid Door	no	0
<b>Total Area of Openings (sq ft)</b>							<b>72.9</b>
<b>Total cfm Required</b>							<b>21,880</b>

Notes:

A typical truck parked in Opening 1 is approximately 8.5 feet wide

When a truck is parked in Opening 1, the area above the truck is assumed to be about 2 feet high, and the area below the truck is assumed to be about 3 feet high.



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